

### **Listing of and Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-13. (Cancelled).

14. (Currently Amended) A catheter comprising:  
an elongate body having a longitudinal axis;  
~~a unitary~~ an electrode having at least one bore formed through the electrode, wherein the ~~unitary~~ electrode couples to and is disposed at a distal end portion of the elongated body;  
a conductive wire extending through said elongate body and electrically coupled to said ~~unitary~~ electrode; and  
an irrigation channel extending through said elongate body and fluidly coupled to a proximal portion of the at least one bore,  
wherein said at least one bore includes at least one fluid outlet branch coupling to a lateral side of the ~~unitary~~ electrode and said at least one fluid outlet branch includes ~~one of a thermally insulating interior casing and a layer of a thermally poorly conductive material disposed within said at least one fluid outlet branch~~ and wherein the at least one fluid outlet branch is formed at an acute angle relative to the longitudinal axis.

15. (Currently Amended). A catheter according to claim 14, wherein said at least one bore couples to a lateral exterior portion of the ~~unitary~~ electrode.

16. (Previously Presented). A catheter according to claim 14, wherein said irrigation channel has a longitudinal axis and said at least one branch comprises a series of outlet openings that guide a fluid supplied through said irrigation channel and said at least one bore.

17. (Currently Amended). A catheter according to claim 16, wherein the series of outlet openings are configured at an angle relative to the longitudinal axis of said irrigation channel, ~~and wherein said angle comprises an angle~~ of between about 30 degrees and about 90 degrees.

18. (Previously Presented). A catheter according to claim 16, wherein the series of outlet openings is provided with a thermally insulating unitary inner casing.

19. (Currently Amended). The catheter according to claim 14, wherein the ~~distal end portion~~ electrode comprises:

a core manufactured from a material having one of a low thermal conductivity and a low electrical conductivity; and

an outer casing surrounding at least a substantial portion of the core wherein said casing comprises a material having one of a relatively higher heat conductivity and a relatively higher electrical conductivity relative to the core.

20. (Currently Amended). The catheter according to claim 19, wherein the core is fabricated from at least one of a plastic material, a ceramic material, and a glass material, and wherein the outer casing is fabricated of a metallic material.

21. (Currently Amended). The catheter according to claim 19, wherein the temperature sensor comprises a thermocouple coupled to a portion of the outer casing.

22. (Currently Amended). The catheter according to claim 14, wherein said at least one bore terminates at an interface between said elongated body and said ~~unitary~~ electrode.

23-26. (Cancelled)

27. (Currently Amended). A catheter comprising:  
an elongate body having a longitudinal axis;  
~~a unitary~~ an electrode having a longitudinal axis disposed  
at a first end of the elongate body and having at least one  
outlet opening formed therethrough at an acute angle relative to  
the longitudinal axis of the electrode;  
at least one electrically conductive wire extending through  
said elongate body, said at least one electrically conductive  
wire coupled to said ~~unitary~~ electrode;  
an irrigation channel extending through said elongate body  
and fluidly coupled to the at least one outlet opening, said  
channel configured to deliver a fluid through said ~~elongated~~  
elongate body from a remote source of fluid and into said at  
least one ~~passageway~~ outlet opening; and  
~~one of a thermally insulative layer of a material and a~~  
~~layer of a thermally poorly conductive material disposed within~~  
~~the at least one outlet opening to insulate~~ insulating casing  
insulating at least a portion of said at least one outlet  
opening.

28. (Currently Amended). A catheter according to claim  
27, wherein said irrigation channel has a longitudinal axis and  
the at least one outlet opening is adapted to deliver said fluid  
to an outer surface of said ~~elongated~~ elongate body in an outflow  
direction, and wherein said outflow direction comprises an angle  
relative to said longitudinal axis of said irrigation channel.

29. (Previously Presented). A catheter according to claim  
m28, wherein said at least one outlet opening comprises a  
plurality of outlet openings.

30. (Cancelled).

31. (Currently Amended). A catheter according to claim  
27, further comprising a temperature sensor coupled to the

electrode at a distance from an interface between said elongate body and said ~~unitary~~ electrode.

32-37. (Cancelled).

38. (Currently Amended) A method, comprising:

deploying an ~~unitary~~ electrode body, having a longitudinal axis, coupled to a distal portion of an elongate flexible shaft into contact with a volume of a target tissue, wherein said ~~unitary~~ electrode body includes a longitudinal fluid passageway formed from a proximal end portion through to a less proximal surface portion and the fluid passageway couples to at least one outlet opening formed at an acute angle relative to the longitudinal fluid passageway;

measuring a temperature of said ~~unitary~~ electrode body with a temperature sensor coupled to the electrode body and spaced from the fluid passageway; and

dispensing fluid from a remote vessel through an irrigation channel within the elongate body coupled to said fluid passageway,

wherein at least apportion of an interior surface of said at least one outlet opening comprises a ~~layer of a thermally insulative material~~ insulating casing.

39. (Currently Amended). A method according to claim 38, wherein the thermally ~~insulative material~~ insulating casing comprises an electrically insulative material.

40. (Currently Amended). A method according to claim 39, wherein one of the thermally ~~insulative material~~ insulating casing and the electrically insulative material comprises a preformed tubular member.

41. (Currently Amended). A catheter according to claim 14, further comprising a temperature sensor thermally coupled to said ~~unitary~~ electrode.

42. (Currently Amended). A catheter according to claim 41, wherein the temperature sensor comprises at least one of a thermocouple and a thermistor.

43-44. (Cancelled).

45. (Currently Amended) A catheter according to claim 41, wherein the ~~unitary~~ electrode is formed like one of a cap-shaped member and a cup-shaped member, each having a convex inner portion disposed adjacent the ~~means for~~ thermally insulating interior casing.

46. (Previously Presented). A catheter according to claim 45, wherein the temperature sensor is coupled to the convex inner portion.

47. (Currently Amended). A catheter according to claim 14, wherein the ~~unitary~~ electrode comprises a relatively thin metallic member coupled to the exterior of ~~an inner portion formed of a relatively low thermally conductive material~~ the thermally insulating interior casing.

48. (Currently Amended). A catheter according to claim 27, further comprising a temperature sensor directly thermally coupled to the ~~unitary~~ electrode and spaced from the at least one outlet opening and the ~~material~~ thermally insulating casing.